

# Engineering in Europe

Vol. 2 No. 2

U.S. Army Corps of Engineers, Europe District

February 1999

### Darmstadt Child Development Center completed in 13 months

Story and Photos by Marnah Woken Europe District Public Affairs

n international team effort led to the successful, 13month completion of Darmstadt's brand new Child Development Center (CDC) which opened in January 1999.

Located in Lincoln Village, the \$7.3 million facility accommodates 244 children and was a high priority project supporting the recent relocation of the 66th Military Intelligence Group from Augsburg to Darmstadt.

Construction on the center began in December 1998 following an October groundbreaking ceremony. Just 13 months later, the center is open for business — making it the first Army CDC to be built in such a short time frame.

The new CDC provides fulltime, part-time, and hourly care for children 6-weeks to 6-years of age, and is a big improvement from the previous center — a converted World War II-era horse stable.

The nearly 20,000 square foot facility offers a state-of-the-art kitchen, floor heating, central air-



Children from the Darmstadt Child Development Center are pictured taking a break from one of the many activities offered at the new center which opened in January. CDC Director Theresa Burke and Europe District Project Engineer Bryan Jordan are also pictured.

conditioning, separate modules for infants, toddlers, and preschool children, and a large playground area for different age groups.

"This is such a big improvement from the old center," said CDC Director Theresa Burke. "We have so much more space which allows us to offer more activities for the

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The Corps' Area Office in Turkey recently received the U.S. Air Force Outstanding Unit Award for distinguished achievements.

Pictured from the TUSEG Area Office (back row from left to right) are Project Engineer Mohammed Ibrahim, JOC Program Manager Capt. Kevin Kearn, Secretary Debbie McMonagle, Project Engineer Maj. Mike Tilko, and Area Engineer and Commander Lt. Col. Larry McCallister.

Pictured front row (left to right) are Deputy Area Engineer Sam Baxter and Administrative Assistant Don Loehr.

Electrical Engineer Sungur Karginer, also from the TUSEG office, is not pictured.



#### TUSEG Area Office receives the U.S. Air Force Outstanding Unit Award

The Corps of Engineers Area Office in Turkey (TUSEG) was recently recognized as a vital member of the 39th Wing Team when it was included in the Air Force Outstanding Unit Award at Incirlik Air Base.

The TUSEG Area Office was heavily involved in earthquake damage assessment and repair, as well as assisting the base with sustainment operations. Throughout the period, they continued to provide Incirlik Air Base with timely and professional services.

In December 1998, Lt. Gen. Michael Short, Commander of the 16th Air Force, presented Col. Dutch Remkes, Commander of the 39th Wing, the U.S. Air Force Outstanding Unit Award for distinguished achievements from June 27 through September 29, 1998. All military units assigned to Incirlik Air Base shared in the award to include the U.S. Engineer Group Turkey, the Corps' Area Office, the Defense Commissary Agency, and the Department of Defense Schools.

The award was presented for the outstanding manner in which the base worked together to continue the mission — including Operation Northern Watch — despite two major earthquakes that did millions of dollars in damages to the base, a 69-day labor union strike that shut down all base sustainment activities, and a record heat wave that caused major shutdowns of over tasked generators and air conditioning units.

#### Engineering in Europe

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# Grand opening held for Bitburg Fire Station



By Marnah Woken Europe District Public Affairs

December ribbon cutting and grand opening ceremony was held for the new fire station located in the Bitburg Family Housing Area, located just outside of Spangdahlem Air Base.

Constructed from the ground up, the new facility consists of three vehicle bays, private living quarters for ten fire fighters, a fully-equipped fitness room, recreation rooms, a completely furnished kitchen, and a command center.

Construction on the new fire station was completed in just one year, and began in October 1997 by the firm Josef Fandel & Sohn from Bitburg, in conjunction with the Staatsbauamt Trier. The design was completed by the architectural and engineering firm Weber from Bitburg.

Europe District Project Engineer Hans-Martin Hoock and Europe District Project Manager Mehdi Pour worked on the project,



A grand opening ceremony was held in December for the new Bitburg Fire Station. The facility, located in the Bitburg Family Housing Area just outside of Spangdahlem Air Base, offers an improved quality of life for the fire fighters who staff the facility 24-hours a day, 365 days a year. (Photos by Mehdi Pour)

designed to improve the quality of life for the U.S. Air Force and German civilian personnel who staff the facility.

"We improved the design by giving the fire fighters their own private sleeping rooms and bathrooms," said Pour. "We did this at very little additional cost, and it really added a lot to their quality of life."

Command Sgt. Maj. Gunderson of the 52d Civil Engineer Fire Protection Flight, commented on the fire station design. "Our fire fighters work and live in the most up-to-date facility in Air Force fire protection," said Gunderson.

"We're very pleased with the design — the single person living quarters, spacious kitchen, and fitness area — it offers the best of everything."

The Bitburg Fire Station is staffed 24-hours a day, 365 days a year, with eight fire fighters trained to respond to any emergency.

"Our fire fighters work and live in the most up-todate facility in the Air Force."

— Command Sgt. Maj. Gunderson of the 52d Civil Engineer Fire Protection Flight

"We improved the design by giving the fire fighters their own private sleeping rooms and bathrooms."

Mehdi
 Pour,
 Europe
 District
 Project
 Manager

## Corps' automated construction management system enhances engineering activities

"This is becoming the industry standard. I hope everyone who is involved with construction will have a chance to use it. It really opens up your eyes to what's going on outside of just one particular task on a project."

Spec. Darren
Rouse,
Headquarters,
Headquarters
Company 130th
Engineer
Brigade, Hanau

Story and Photos by Marnah Woken Europe District Public Affairs

The U.S. Army Corps of Engineers'
Theater Construction Management
System (TCMS) is a computerized
planning, design, management and reporting
system used by Army engineers for
construction activities.

Originally developed in 1990 by the Corps' Construction Engineering Research Laboratory (CERL), at the request of the Office of the Chief of Engineers, TCMS automates engineering activities previously performed manually — making the design and construction process much easier.

"TCMS offers a vast array of designs for projects as simple as guard towers to something as complex as full blown base camps," said Scott Lowdermilk, TCMS Coordinator for Europe District. "One of the biggest benefits to TCMS is that it's much easier to use than its predecessor."

"I'm a battalion construction officer so it's important for me to know how construction is going and if it's being done correctly," said 1st Lt. John Morrow of the 94th Engineer Headquarters and Support Company in Vilseck. Morrow recently attended TCMS training and added, "I'll be able to use this program for project planning and management."

"For example, if we want to build a warehouse with certain dimensions, interior electricity, and a concrete pad, I can go to this program and pull up what I want. I can add or subtract details and come up with a pretty good estimate of how long the project will take, what materials and labor are needed, and how much it's going to cost."

"It's a lot better than the old system which involved working with a lot of old manuals," Morrow added. "I also like the fact that you can use the TCMS database with Microsoft Project software to get a visual picture of what you want."

Before TCMS was created, military personnel used design manuals from the Army Facilities Components System, along with several other large technical manuals, according to Lowdermilk.

"TCMS eliminates the time previously spent performing design functions manually, calculating labor and cost estimates, and other functions," he said. "Now the same soldier just needs a computer with a CD-ROM to have all of the same information at his or her fingertips."

Europe District provides TCMS training for active duty, reserve, and civilian personnel throughout U.S. Army, Europe,



1st Lt. John Morrow of the 94th
Engineer Headquarters and Support
Company in Vilseck, works with the
Corps' Theater Construction
Management System (TCMS). Europe
District provides training on the
computer software program, designed
to simplify engineering activities.
TCMS training is available for active
duty, reserve, and civilian personnel
throughout U.S. Army, Europe.

according to Lowdermilk, who added the TCMS program is currently being used by engineers in the Bosnia theater of operations.

"Over the past two years, we've provided training to over 90 active duty and reserve Army engineers. Classes are generally two to three days in length, depending on student needs, and centrally funded by the Department of the Army so there's no cost for the training or the software."

The training package includes the TCMS program as well as two commercial software packages — AutoCAD LT and Microsoft Project.

"AutoCAD LT is needed to view and manipulate designs, and Microsoft Project is an added bonus that allows the user to manage a project from cradle to grave," Lowdermilk added.

The CERL transitioned TCMS to the Corps' Huntsville Engineering and Support Center District for management, and began managing and further developing the program in 1993. The Huntsville Engineering and Support Center continues to maintain, distribute and provide hands-on training.

Combining state-of-the-art computer hardware and software, classes provide information on project planning, design, management, reporting, and communication.

"The classes familiarize students with the TCMS system so they can learn to develop and manage projects," said Sandra Mayes, TCMS Support Personnel from the Huntsville Engineering and Support Center.

"I'm a construction platoon leader and this class will help me with planning and managing our construction projects," said 2nd Lt. Amanda Pomnerenck of Alpha Company 94th Engineer Combat Battalion in Vilseck.

"This is a good, straight forward program with plans for a lot of different projects. I can use the TCMS program for project plans to get a general idea of the project cost and how many people I'll need. This gives me a good base for planning," she added.

Spec. Darren Rouse, Headquarters, Headquarters Company 130th Engineer Brigade in Hanau is a surveyor in the construction management section, and recently completed TCMS training.



Spec. Darren Rouse of Headquarters, Headquarters Company 130th Engineer Brigade in Hanau, and 2nd Lt. Amanda Pomnerenck of Alpha Company 94th Engineer Combat Battalion in Vilseck, attended TCMS training through Europe District.

"This is becoming the industry standard," said Rouse. "I hope everyone who's involved with construction will have a chance to use it. It really opens up your eyes to what's going on outside of just one particular task on a project."

"The students seem very pleased with the program and they all seem to be impressed with the product," said Fred Steinman, TCMS Support Personnel from the Huntsville Engineering and Support Center. "The class gives them a basic knowledge of what the program can do. They can use the basic information in the program as a starting point and then develop a project that suits their particular needs."

TCMS training has been conducted in Germany, Korea, Japan, Hawaii, and Panama, according to Steinman. "Anywhere you find the Army Corps of Engineers in the world, we've done the initial training," he said.

For more information on TCMS training with Europe District, contact Scott Lowdermilk at DSN 336-2642 or civilian 0611-816-2642. More details can also be found on the internet at http://www.hnd.usace.army.mil/tcms/index.htm

"The classes familiarize students with the TCMS system so they can learn to develop and manage projects."

- Sandra
Mayes,
TCMS
Support
Personnel,
Huntsville
Engineering
and Support
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#### Darmstadt CDC From Page 1

"The quick execution of this project justifies funding for new projects and gives credibility that execution can be done quickly and with high quality."

Pat Johnson,
 CDC Facilities
 Project
 Manager,
 Deputy Chief
 of Staff,
 Personnel,
 USAREUR

A new playground surrounds the new Darmstadt Child Development Center which was constructed in just 13 months.

children. We've already received a lot of positive comments from parents about the new center. Just the openness and brightness in the design makes such a big difference."

The new CDC was built with the first Military Construction Army (MCA) money Congress has provided for Europe, since the early 90's military drawdown.

Due to the project's success, the design will be used for future projects in U.S. Army, Europe (USAREUR), according to Pat Johnson, CDC Facilities Project Manager, Deputy Chief of Staff, Personnel, USAREUR.

"The quick execution of this project justifies funding for new projects and gives credibility that execution can be done quickly and with high quality," she said.

"It was a pleasure to work with such a professional team," added Johnson. "Whether it was Al Opstal and Bryan Jordan from Europe District, Sandra Zettersten from the Darmstadt Directorate of Public Works, the contractor Klee KG, the Staatsbauamt Darmstadt, or the design firm Weidleplan — it is the best team I've ever worked with for the design and execution of a CDC."

The interior and exterior design of the facility was completed by Weidleplan Consulting GmbH from Stuttgart under contract with the Darmstadt Bauamt.

"The first month of design was the most important," said Europe District Project Manager Al Opstal. "We established the footprint of the building by considering many design options and site constraints that required coordination with several stateside





Education Technician Kim Bultinck cares for 11-month-old Natalie Thorne at the brand new Darmstadt Child Development Center which opened in January. The new center is located in Lincoln Village.

agencies. By being extremely goal-oriented, our real-time design period was only six months."

Construction on the new center was completed by the firm Klee KG from Ilvesheim. Grounds for Play from Arlington, Texas completed the design and construction of the playground, and the Fries Firm from Darmstadt completed the landscaping.

Opstal added that part of the project's success was due to a solid partnership with the host nation construction and design firms.

"The Staatsbauamt Darmstadt did an exceptional job working with us on the center," he said. "This facility has state-of-the-art utilities and energy monitoring systems that are ahead of their time in the Darmstadt Military Community. The building is fully air-conditioned which is common in the U.S., but unique in Germany."

Along with state-of-the-art utility systems, special child safety features can also be found throughout the facility — they include safety glass on windows, rounded wall and furniture edges, radiator covers, lowered cabinets, and special water temperature settings.

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Darmstadt Child Development Center cooks Leonard Smith and Myriam Frederick work in the center's new state-of-the-art kitchen. The new kitchen is a big improvement over the previous one (pictured right), located in the old CDC.

"It's great to be a part of a project that makes children happy and gives parents peace of mind," said Sandra Zettersten, Chief of Contract Administration for the 233rd BSB DPW. "This project truly reflects the principles of partnership between planning, design, construction and user elements. I'm very proud to be part of such a great partnering effort."

Because the center was constructed in the middle of Lincoln Village Family Housing Area, Zettersten added that safety was an important part of the project.

"Europe District Project Engineer Bryan Jordan was very proactive when it came to safety on the project and it paid dividends as the record shows," she said. "He was instrumental in the installation of fences and walking paths, and rerouting traffic. He did what he could to keep everyone safe during construction."

Zettersten added that Jordan was instrumental in making the customer, and everyone involved with the project, part of the decision making process.

"With any project, it's important to find out who will be using the facility and have them participate early in the construction process," said Jordan. "It's also very important to find out who will be participating in the final inspection and make sure they're on-site on a regular basis — as soon as the walls go up."

"It's also important to try to gain time on the schedule — even at the beginning, he added. "You never know what surprises might come later."

"This project was a success due to a team

effort and Europe District's vision of faster and better," said Opstal. "We all put our minds to the task and remained focused on the project throughout."

Other individuals who made the Darmstadt CDC project a success include Darmstadt Staatsbauamt Project Manager Willi Benz and Project Engineer Hans Ritzert, Weidleplan AE Project Manager Eberhard Rampl, Firm Klee Construction Representatives Hans Juergen Egly and G. Staengel, Grounds for Play AE Eric Strickland and Construction Representatives Larry Roahrig and Sherry Dudinsky, Michael Fries from Fries Landscaping, 233rd BSB DPW Housing Projects Representative Detlev von Chamier, CDC Director Theresa Burke and Assistant Director Sara Howell.

An official grand opening and ribbon cutting ceremony for the new center was held in February.

"It's great to be a part of a project that makes children happy and gives parents peace of mind."

— Sandra Zettersten, Chief of Contract Administration for the 233rd BSB DPW



The new Darmstadt CDC provides full-time, part-time, and hourly care for children 6-weeks to 6-years of age.

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#### **Grand opening held for Bitburg Fire Station**

Members of the Bitburg ROTC participated in the December grand opening festivities of the new Bitburg Fire Station. The new facility is located in the Bitburg Family Housing Area, just outside of Spangdahlem Air Base. Constructed from the ground up, the new fire station consists of three vehicle bays, private living quarters for ten fire fighters, a fitness and recreation room, and a command center. For details, please see story on page 3Photo by Mehdi Pour)